# Hot Iron News NWBA



THE VOICE OF THE NORTHWEST BLACKSMITH ASSOCIATION

Fourth Quarter 2017





## **Northwest Blacksmith Association**

"To promote and preserve the Art and Craft of Blacksmithing while building friendship and good will."

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- Safety Subcommittee:
- Mentoring Center Subcommittee: Peggy Gudgell (Chair),

Nominations & Elections Committee: Jim Garrett (Chair), Kellen Bateham, James von Mosch

#### **Quick Reference for NWBA Members**

Submit articles, photos, how-to's to HIN: nwbainfo@gmail.com

NWBA Website: www.blacksmith.org

For NWBA correspondence or membership, or to change your

address (must be in writing) send to: Northwest Blacksmith Association

4742 42nd Ave SW #185

Seattle WA 98116

Annual dues 2017: \$60 (foreign, \$70)

Dues include quarterly subscription to Hot Iron News.

Dues may also be paid online at

http://blacksmith.org/membership-payment-gateway/

Want to be sure to keep up to date? Sign-up to receive email announcements monthly so you don't have to miss another event!

http://blacksmith.org/sign-up-email-announcements/

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#### ON THE COVER



Ram's Head Tomahawk forged by Darryl Nelson Darryl demonstrated how to forge this at his Swaptoberfest 2017 demonstration. Full article on page 22.

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Back Cover: Beaudry Power Hammer!

## **NWBA ELECTIONS 2017** RETURN YOUR BALLOTS POSTMARKED NO LATER THAN DECEMBER 31, 2017

NWBA Elections 2017 ballots are in the mail, you should have received yours or will be receiving one very soon. If you have not received your ballot please contact Jim Garrett, the Election Committee Chairman, nimba@olympus.net

NWBA Board Meeting
& New Officer Elections

Get in on the
behind the scenes action

January 27, 2018 1 pm-4pm

Longview Public Library, Longview, WA



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## A Word From What's-His-Name

Hello, Everyone!

The Holiday Season is here again, and that means it's time to vote! Get your ballots in! And consider running for the Board of Directors yourself next year!

The experiment we call "Swaptoberfest" was largely a success. There was a learning curve, of course, but we'll be applying those lessons learned for Swaptoberfest II. Let us know who you would like to see as a demonstrator! Tentative dates are October 26th through 28th of 2018. Known for certain is a 12:00 Noon start time on Friday.

In March, we'll have a 3 day workshop with Mark Aspery (Tuesday 3/2/187 through Thursday 3/29/18). For more information, look on our website at http://blacksmith.org/events/mark-aspery-workshop-2018/

The 2018 Conference will take place (Mother's Day Weekend). (Save the date!) Look online at http://blacksmith.org/events/nwba-conference-2018/, or check page 28 of this Hot Iron News. Expect another awesome Friday potluck. Hands-On from Alair Wells, Bill Apple, and Peter Clark will be in the Mentoring Center. Building 13 will house Tailgating. Our main demonstrators will be Scott Szloch from Shoreline, Washington, Rachel David of New Orleans, and her cohort Ben Beames from Tasmania. Of course there will be contests, the Banquet, the Auction, the Fire Pit, and loads of fun and education!

There will be a power hammer in the 2018 Conference Auction. See page 30 for details!

Also, if you pre-register through http://blacksmith.org the line is much shorter (Let folk know.) Online pre-registration will be available mid-January 2018.

On July 21 of 2018, we'll have open forge in the morning. We'll

waive the normal \$10 fee for folk willing to help rearrange everything in the afternoon. We'll be cleaning for company, you see...

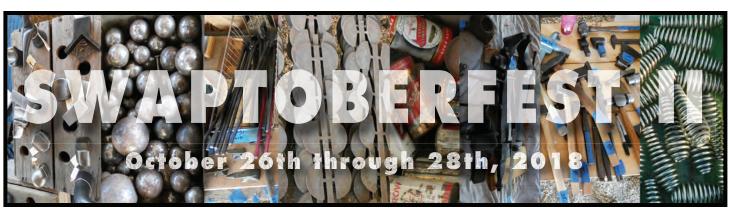
On July 25-28 of 2018, we'll be open to the public during the Cowlitz County Fair. It would be great to have four volunteers per day on Friday & Saturday (27th and 28th) as well as two or three per day on Wednesday & Thursday. A sign-up sheet will be in the Mentoring Center. My name is already on it.

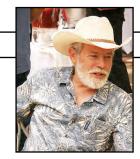
August will see our annual maintenance session in the morning. Folk helping out will have the \$10 fee waived for that afternoon's open forge. Speaking of waiving that \$10 fee... the Board of Directors has been considering waiving it for anyone volunteering as a registrar. (A "registrar" is the guy or gal taking names and money.) If you think this is a good idea, please DO let your friendly Board of Directors know! You can find our contact information in the usual places: either inside the front cover of this Hot Iron News, or online at http://blacksmith.org/board-directors/

Stay Inspired!

-Lee Cordochorea

(You pronounce that just like it's spelled.)





#### Third Quarter 2017 Financial Report

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**General Income** 

Total General Income	3009.60
Donations	95.60
Advertising	234.00
Membership Dues	2680.00

#### **Mentoring Center Income**

Event Fees	160.00
<b>Total Mentoring Center Income</b>	160

**Total Income** 3,169.60

#### **Mentoring Center Expenses**

Supplies		<u> 128.17</u>
<b>Total Mentoring</b>	<b>Center Expens</b>	es 128.17

#### **Conference Expenses**

<b>Demonstrator Travel &amp; Lodging</b>	<u>59.93</u>
<b>Total Conference Expenses</b>	59.93
Total Expense	4,276.06

**Net Ordinary Income** -1,106.46

#### **Expense**

**General Expenses** 

Merchant Fees	75.44
PayPal Fees	25.92
Board Meeting Expenses	150.00
Communications Director	3,600.00
Postage & Delivery	19.60
PO Box Rental	217.00
Total General Expenses	4 087 96

**Net Income** -1,106.46

## A Note from the Editor Amy Mook

I reflect on the year that has just gone by, and while I website and in the Hot Iron can hardly believe how fast it went, I am equally in awe News, there has been a lot of how much went on. In 2017 NWBA put on:

- A full conference and Swaptoberfest!
- SEVEN high caliber demonstration/open forges at our monthly Mentoring Center events,
- THREE maintenance and open forge monthly Mentoring Center events.
- Four Board meetings

In addition, NWBA has worked closely with the Cascadia Center for Arts and Crafts (CCAC) to bring you information about their Blacksmith Week and many of the CCAC blacksmithing workshops. All for one and one for all in the name blacksmith education and good old fashioned group fun with metal. Between NWBA and CCAC, and all the independent blacksmithing schools and events that have been listed through our of blacksmithing opportunities in 2017!

If you have a local blacksmith event that you would like to include in our listings, please send them to me: webmaster@blacksmith.org

I loved SWAPTOBERFEST! It was low key and jam packed. And, it seems everyone there had a great time, it is already on the calendar for next year, October 26-28, 2018.

Cheers to the stalwart members who have stepped forward to run for your board of directors. The board serves you - NWBA members, but cannot maintain our assets and events without your participation too! If we all step up together it will be like a dance party, so much fun you don't even notice you're working. Volunteer!!

Happy and Safe New Year to You, ~ Amy

### **NWBA Board of Directors 2017 Election**

Positions are a two year term, 2018 & 2019

This year we have six excellent candidates offering time, energy, talent and organizational skills to the continuity of our group. There are **5 positions open**, with **6 nominees and a space for a write-in candidate vote**. When you receive your ballots, please participate and vote for the **five** volunteers you feel best represent what you think the NWBA should become as we grow and move forward.

#### Candidates' Statements NWBA Board of Directors Elections 2017



## Kellen Bateham

M I S S I O N STATEMENT-

I have been a serving board member for two years now and have spent the last year of

that as Vice President. As I see it, there are two halves of the NWBA: Conferences and the Mentoring Center.

CONFERENCES- I'm a conference guy and absolutely love to see them go off well. I feel that with the occasional exception, they have been getting better every year recently. Adding Swaptoberfest to the schedule really filled a void for us and I want to work to make it a Fall staple for us and the tool selling community. The Spring Conference is already running fairly smoothly and I would work to maintain that as well as expand on aspects like competitions and merchandise. Planning these events and having boots on the ground during them would be my main focus if I am reelected.

MENTORING CENTER- I live a little too far away to make many of the mentoring center events and would expect that trend to continue for me. I do feel that it is time for a change in how it is ran and managed though. If the NWBA is committed to the success of the Mentoring Center it is time to hire and pay someone to manage it. When we needed the website and the HIN to run smoother we hired Amy Mook (who does an outstanding job!) to solve our problems. This is no different. If reelected I would advocate for making this happen.

BIO- I currently live and work as a Sole Occupation Blacksmith in Bend, Oregon with my son Silas and my dog Doon. Beyond the NWBA I am also on the Board of Directors for CCAC on Mt. Hood, where I am working towards expanding craftsman programs, helping to put on events like

Blacksmith Week, and acting as liaison between the NWBA and CCAC. I am also the Education Czar for the Central Oregon Metal Arts Guild (COMAG).

Cheers and happy forgings, Kellen Bateham



## Lee Cordochorea

In my opinion, the real job of a director of the NWBA is twofold. A director must serve

the best interests of the collective general membership. A director must implement the Association's Mission Statement. I have not always been successful at these. Not always.

I do think I've done a good job overall. If you agree, please consider voting for me to continue for a third and final term.

Whether you think I've done a good job or not, PLEASE consider running for the board of directors yourself next year! Serving on the board is the single best way I know of to insure the continuing success of this terrific Association.

Lee Cordochorea



## Silas Maddox

In the early 2000's my first real exposure to blacksmithing was attending an NWBA conference in Mt. Vernon. This

was a life altering experience. I was already hooked on metalworking but had little idea of what blacksmithing was. The energy and enthusiasm at those first few conferences that I attended nudged my path in life and led me to the road that I currently travel.

After travelling the country to train and work with different smiths I ended up back in the Northwest working for blacksmiths in Seattle and eventually opening my own business, Forge & Nail, in 2011. I have since moved to Sedro-Woolley, WA where I am self employed doing architectural blacksmithing and assorted other pursuits.

The NWBA gave me the exposure to blacksmithing that started my journey and has provided me with some of my best friends and access to some of my blacksmithing heroes. I figure it is time to pay it forward and help to keep the NWBA the best and most active blacksmith association in the land.

Thank you, Silas Maddox



## Paul Thorne

Dear Friends,

During the Spring Conference I was nominated to serve on the NWBA

board. The NWBA is very special to me and I can't imagine what my career would have been without it. I have been a full time smith for 35 years and a member of NWBA since 1988. Most of my work is interior architectural/ sculptural in nature. Many of you celebrated these good years with me and helped me through the lean ones. You are my core friends. Thank you.

We live in confusing times. I believe that there is a strong desire from the pubic, particularly young people, to learn smithing and to get in touch with a worthwhile life focus. During the last few years I've refocused my work into teaching and tapping into the expertise of other smiths. If elected, I would like to focus on education and training.

Paul Thorne thornemetals.com



## David Tuthill

I've been a member of the NWBA since around 1995. In that time I've had varied levels of involvement, and

have seen a lot of changes- some good and some not so good. One thing that has not changed, has been the need for a core group of people both professional and non professional, to keep the club moving forward. I served on the board in the early 2000's just prior to our groups journey into the dark ages. I'm happy to see that we have mostly recovered from that episode, and thanks to the determination of some of the board members that followed that chapter, there have been some new and exciting things taking place.

By re-joining the board, I hope to help generate even more momentum, so that we can not only continue growing

as a group, but also meet a much bigger challenge, which is to create events that are higher profile, involve the public, and bring a more modernized and contemporary perspective into our unique and amazing craft. I am of the opinion that this would benefit professionals and part-timers alike, by challenging many of us to get out of our comfort zones, and try new things. In my numerous conversations with smiths and other tradespeople both in our country and abroad, there have been a number of parallel themes. One that stands out for me, is that ultimately it is up to us as blacksmiths and designers to understand the ideals and esthetics that come with today's architectural trends. If we can't speak their language, we are doomed. Likewise, we must know how to communicate to our clients, both literally, and physically to show that we are up to the task of participating in the dialog of contemporary architecture, sculpture, or what have you, and be a relevant part of the conversation.

As both a participant and an observer, I have numerous thoughts on how we can implement some of these concepts as a group. However, it will take a concentrated and coordinated effort between our board and our membership to see these things come to fruition. Among the ideas that I have are bringing more interdisciplinary crafts people into the loop at conferences, so that we have an opportunity to gain perspective on how our work can interact with the work of others. Also in the forefront of my mind is how to tackle the challenges associated with involving the

public either at our conferences, or by bringing a group, or groups of smiths to events that could support the building and completion of sculptural work that would be for permanent public display. We have so much potential as a craft and as an art form, and though I have seen some things moving forward over the years, I believe that we still need to be wary of stagnation if we are going to keep going in this world. Let us make our presence known!

Thank you, David



## Jim von Mosch

I am Jim Von Mosch, and have been the NWBA treasurer for this

term. There are a lot of details to the treasurer's job and a long learning curve. I have met some of my goals, not so much on others. I am interested in serving a second term in order to complete these goals in order to pass on to future treasurers a turn-key system of record keeping and budgeting.

Thank you for your support.

Jim von Mosch

NWBA Elections 2017 ballots have been mailed, you should have received yours.

If you have not received your ballot please contact Jim Garrett, the Election Committee Chairman, nimba@olympus.net

RETURN YOUR BALLOTS POSTMARKED NO LATER THAN DECEMBER 31, 2017

#### **Mentoring Center September 23, 2017**

### **Dean Mook: Techniques for Forging Aluminum**



Dean Mook gave a fast paced demonstration of how to adapt steel forging techniques to forging aluminum. Steel forging temperatures are about 2-3 times hotter than aluminum, which forges at temperatures between 600° -900° F. Dean prefers forging in the lower range, and because it is difficult to see the subtle color changes when the aluminum is in the forge, he uses a piece of wood as a testing stick. Wood burns at just under 600°, rubbing the testing stick on the hot aluminum leaves a char mark when the temperature is just right... but you have to get to work right away because aluminum does not hold the heat very well. Take advantage of each heat; know what you want and control the hits.

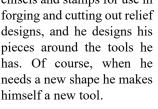


Aluminum is fussier than steel and the surface tends to get hard, and to curl over and cause a cold shut. Use a file or disk with worn out pad to take down corners and avoid cold shuts.

Aluminum heats from 500-750°F very quickly, if it gets too hot you can set it flat on the anvil and lay your hammer on top to suck the heat out of it.



Dean has a set of various chisels and stamps for use in himself a new tool.





"Design with the purpose in mind" is his practice... no sharp edges or pointy tips on a key chain fob that will be in your pocket.



Dean forged the eye of the bird head first as it takes more heat to raise that much material. He curved the beak over the edge of the anvil with glancing blows and cut it off with a large curved chisel. Feeling for burrs, and sharp edges, he then filed it smooth.



usually Dean uses aluminum as sculptural parts because they are white and it compliments the steel and copper. He also has used it to make light weight barbecue and fireplace tools, kitchen utensils, and more.













Dean used the clam motif extensively in a project he did for a condo development in a former clam cannery. Blank out the piece, it is easy to do and saves from over forging. Always use the temperature stick, heat moves quickly. Dean fullered for texture, then shaped the curved bowl of the shell on a wood stump... i.e. wooden

anvil using a polymer hammer. Any contact with steel will

leave a mark on the aluminum. Mark with

a chisel for the fold, carefully bend in the vise, then with a little pressure on the face of the anvil fold the rest of the way.





A simple and charming set of salt and pepper shakers made from 1" square aluminum tubing. Dean used his guillotine fuller to fuller in 3 places, coming down on the corners first, and turning on each blow.

The guillotine may stick to the aluminum on the first blow, you may have to lift the arm each hit. Be sure to stay perpendicular to the length to make uniform halves. Cut the two sides apart and forge the top of each shaker together, forging in the holes to the desired size, salt wider than the pepper usually. The bottom holes can be tapped and sealed with a small screw. Getting fancy, before fullering put a mandrel on the inside and decorate the outside with stamped designs.



## Dean Mook: Techniques for Forging Aluminum, continued



Aluminum may oxidize and look dirty. Scrub it off with scrubby or fine sanding pad as shown above.





Here Dean is demonstrating making teeth with the use of a screw driver, then larger teeth with a fuller. Experiment with different size screw drivers and fullers, and varying angles of blows.

In Northwest Indian art, totems are not representations of animals, they are representations of animal spirits. Bear is Bear Spirit with human aspects. Sun teeth are more like human teeth, squared off. The spacing and shape are important for achieving the character of the animal spirit.





A pair of candlesticks made from 1 1/4" round aluminum pipe. Each is marked at the fuller mark with a Sharpee, which disappears when hot, so he marks it cold with a tool before heating. If you hit aluminum when it is too hot it will shatter. If you suspect your piece is too hot then cool a bit, then it will be OK to forge. First fuller on the larger side of the guillotine, then on the smaller, pinching in gradually. The smaller fuller leaves a perfect little hole less than 1/4", that can be tapped and sealed with a screw with finished. Keep in mind that gripping the aluminum piece with steel tongs will leave a mark if you are not careful. Fuller at the mark just above the base.





Flare the cup end of the candlestick over the horn, Coming in straight on the horn to begin, then at an angle to lift and curl the lip of the cup using consistent hits with a rounding hammer. Set aside to cool while working on the base stand.

Beginning with a disk of the desired size, make radial texture marks with a fuller. Slightly cup the base in a swage, the textured surface is forgiving so you can do this in a steel swage. Start in the center, then work around the edges. Use the flat of the anvil to remove ripples.







Dean made this tiny goblet using similar techniques as demonstrated with the candlesticks and salt and pepper shakers.

#### Thank you Dean Mook for your great demonstration! Find out more about Dean and his work at www.deanmook.com



#### Remember the Group Fish Sculpture made on Mt. Hood at Blacksmith Week 2017?

Here it is, all assembled, finished mounted on a rock in the sculpture garden at Summit Camp, where Cascadia Center for Arts and Crafts has its annual Blacksmith Week Gathering. Haven't been before? Save the Date: August 16th - 19th, 2018 Seeing the sculpture garden in person MUCH better that in these photos!



## Swaptoberfest Masquerade Metallique Contest

The First Annual Masquerade Metallique Contest drew nine fantastic entries, each unique and with a lot of character. Votes were cast, winners selected and 1st, 2nd, and 3rd place prizes were given, \$250, \$150 and \$100 respectively. Many who did not take on the challenge this year expressed the intention to join in next year. It is never too early to start planning and forging, the competition is steep!











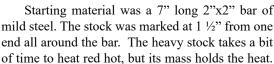
**Swaptoberfest Demonstrator** 

**David Tuthill: Forging a Stake Anvil** 

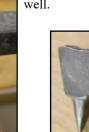
It is always a pleasure to watch a fine craftsman working with their tools, and when the tools themselves are a works of beauty, you know you are witness to the work of an artist. With the help of some trained, skillful and powerful strikers David Tuthill managed to make this project look easy. It may be fairly simple, but it is definitely not easy.

David likes stake anvils of all shapes and sizes. His inspiration? Years ago Jorgen Harle started with a 2" x 2" x 2" cube of steel and forged a little anvil. The stake anvil he demonstrated was made of 2" stock, suitable for small metalsmithing and jewelry work. Ones that he is currently working on in his shop, made from 3" stock, will be used for small bladesmithing anvils. (to be used in his beginning knife making classes where beginners tend to be hard on his anvil). On those he will use his hydraulic press in addition to the techniques of this demonstration.





David noted that the small gas forge he was using was heating surprisingly well.



Small stake anvil examples made by David circulated around the room. They were forged 'as is' requiring only a small amount of cleanup with a pad

for the smaller and a little rasp for the larger one. David said, "I get satisfaction out of planning

and forging as precisely as possible. If done right very little finish is needed."

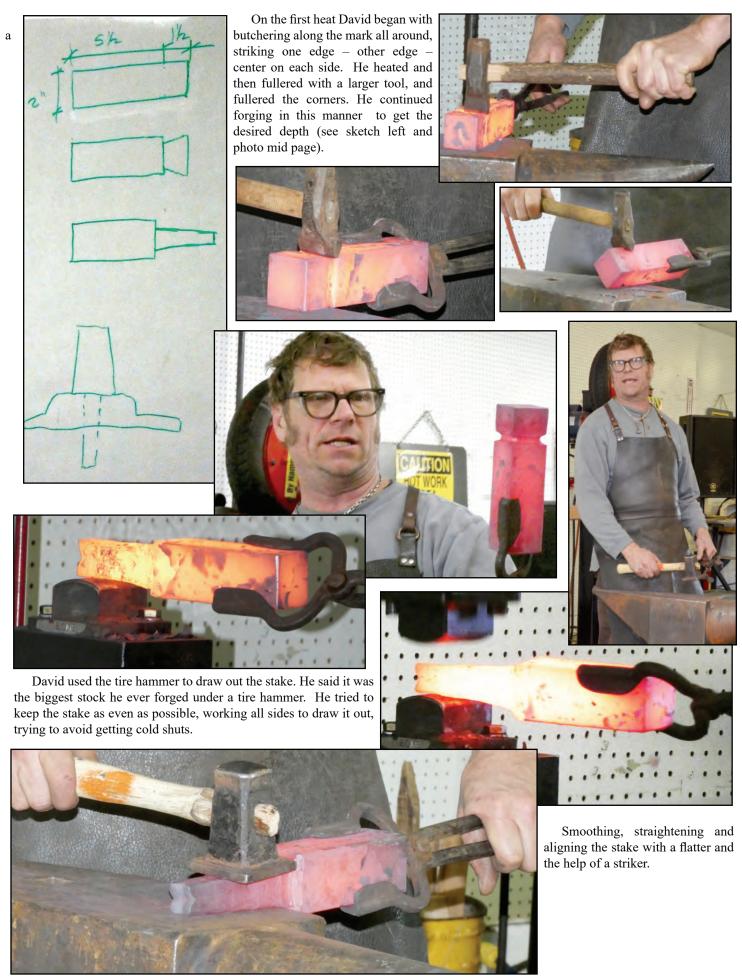
The central piece of equipment was a handsome, custom made upsetting anvil, low and solid. Primarily used in this project for upsetting the stake anvil, it was built to accommodate the long and stout stake and to provide a solid base at just the right height for striking. The base is filled with wheel abraded steel stock and sand, all coated and soaked in oil to prevent corrosion.











## continued....Swaptoberfest Demonstrator David Tuthill: Forging a Stake Anvil

When setting the stake, before upsetting the body of the stake anvil, heat to orange heat so it will shrink as little as possible but still remain malleable. Approach the fit slowly to avoid making the stake too narrow. If the stake is too narrow for the base mounting plate, heat it hot right behind the shoulder with a torch and then upset it to fatten it up. If the stake anvil will be driven into a stump the fit is not as critical. Do not make the shank of the stake too long, Make corrections as needed. A divot in the shank to orient the alignment will assure that it is always placed in the hole the same way, for creating the best fit. Here the fit is a little tight and twisted, David untwisted it by hand hammering with a flatter. Check alignment by standing center and looking straight down.





Bhakti Sa striking for David

David took a moment to clean up the stake at the shoulder, filing off a few burrs.

The stake does not need to be exactly centered, but the anvil sides need to be parallel and the face create a flat surface. The anvil was looking a little off kilter so a plan was formulated to straighten the anvil base. He proceeded to heat the base in the forge, with anvil face sticking out. Then he used the flatter on the anvil and with the help of a striker straightened the stake anvil and then set it once more in the base and upset it with hard blows. This squared up the shoulder of the stake to seat it really well.

To further upset and form the anvil, heat to bright hot heat with stake sticking out of the fire. Set the stake in the hole of the striking stand and begin vigorous striking, upsetting the mass of the anvil. The extremely talented team of strikers hit round robin and got the job done in only a few heats.

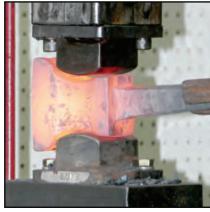




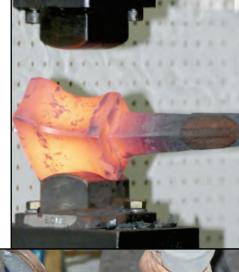
Bhakti Sa, David and Scott Szloch striking while Patrick Maher holds the piece down with tongs.















David continued to form the stake anvil using every surface and hammer available, with and without assistance from strikers. He moved from the large anvil face and horn, to the tire hammer, picking up rounding hammers, flatters, fullers,

whatever would nudge the material where he intended for it to go. He took special care to avoid forging cold shuts on the underside of the horn. The bick was forged in large part with hand tools, but the power hammer was used to speed up shaping.

#### concluding....Swaptoberfest Demonstrator

## David Tuthill: Forging a Stake Anvil







As you can see in the photos to the left the anvil got a little too far out of alignment, but with some properly aligned blows the stake and anvil were straightened out.

David used the hot rasp to remove flaws before going further. A curve had formed in the bick when forging over the horn to draw it out, the tip curved up a bit, so David flattened it on the face of the anvil, then proceeded to clean up the face of the stake anvil.

The stake anvil was completed, from starting stock to finish, in just under three hours, a formidable feat.

Many thanks David Tuthill and his strikers for a fun, well organized and informative demonstration.



There is much, much more to David Tuthill's metal working repertoire, well worth checking out at his website.

http://davidtuthillmetals.com/



And he is represented online as part of the Contemporary Blacksmiths:

http://www.contemporaryblacksmiths.org/david-tuthill



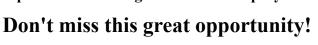
## Mark Aspery is coming to NWBA!

Mark Aspery is an excellent blacksmith instructor who has authored many highly acclaimed books on the subject. He will be teaching a 3 day Beginning Blacksmithing class, Tuesday - Thursday March 27th-29th, 2018.

The following Saturday he will demo at our Mentoring Center, March 31, 2018.

Sign up online in January. Current information can be

found online: http://blacksmith.org/events/mark-aspery-workshop-2018/





## **Swaptoberfest Demonstrator Andy Dohner: Fly Press Tooling**

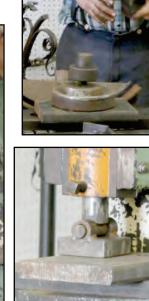
A mostly pictorial recap of Andy Dohner's demo, with apologies for the brevity and gaps.

Straight forward and thoughtful, Andy Dohner had a lot to share about tooling and creative approaches to efficient and reproducible metalwork. He is very passionate about finding the best ways to do production work, and readily adapts them to his non-production projects as well. The fly press is ideal for controlled bending and pressing metal, and a power hammer is great if it will help production be easier or more exact.

Andy uses S7 tool steel for press tools. His set up and tooling is designed for ease of use, switching from one set of tooling to another and adjusting the bases is simple and quick.



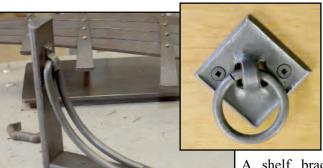








Various tooling for the fly press.



A shelf bracket and drawer pull, both made with the help of Andy's production tooling.



Power hammer dies.

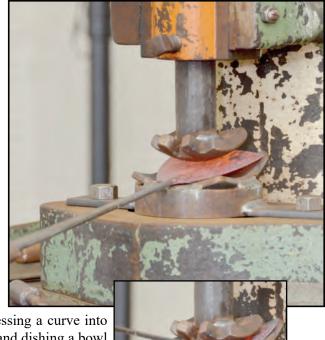








Bending a curve is easy with this adjustable half-round base and stake. Bend cold, on the flat or on edge, and the best part is that there are no tool marks.





Bend Hot: Pressing a curve into a handle (left) and dishing a bowl in a cooking utensil (right).









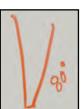
Though not always a good solution for punching holes, a fly press works fine with thin stock. On thicker stock the punch tool heats up and needs frequent changing, and is frustrating to work with.

The hole in the spatula handle is punched, not cut. Heat with a torch, mark with the press on both sides of the piece, heat again. Change the bolster and punch and drift all in one. Do this in short baby steps, don't ram through.



Words from the wise: an experienced craftsman taught Andy that a punch will come out of the hole easily if the angle of the taper is 75° steep on the sides and 80° on face edges...and he was right.









A sample of Andy's sculptural work.

A brief search on the internet reveals that Andy has taught at New England School of Metalwork, Peters Valley School of Crafts, and Penland, and that was just the first page of search results. He has been working with metal for over two decades and is a dedicated artist. Originally from the East Coast, Andy currently lives and works in Roseburg, Oregon.

Thank you Andy Dohner for your demonstration packed with so many gems of advice for use of a flypress, and so much more.

Find out more about Andy and his work at http://andrewdohner.com/

## **Swaptoberfest Demonstrator**

## Darryl Nelson: Ram's Head Tomahawk

Photographs by Dan Bowyer

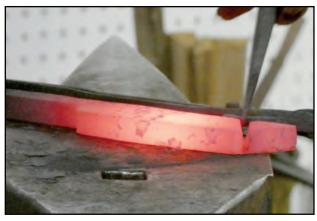
Although it was early Sunday morning after two days of activity, Darryl drew a full crowd to his demonstration.

A throwing axe wants to flare at the top, but a tomahawk flares at the bottom. The style blade of this Ram's Head Tomahawk is an English trade axe tomahawk. In the early days different nationalities had different patterns of axe, the French blade comes to a point, a Spanish broad axe flares top and bottom.

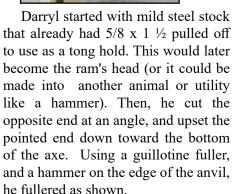
Darryl used all hand tools for this project though he probably would use his power hammer doing it in his own shop. He wanted to make sure that the blacksmith who does not have a power hammer at home would still be able to go their shop and make a tomahawk.







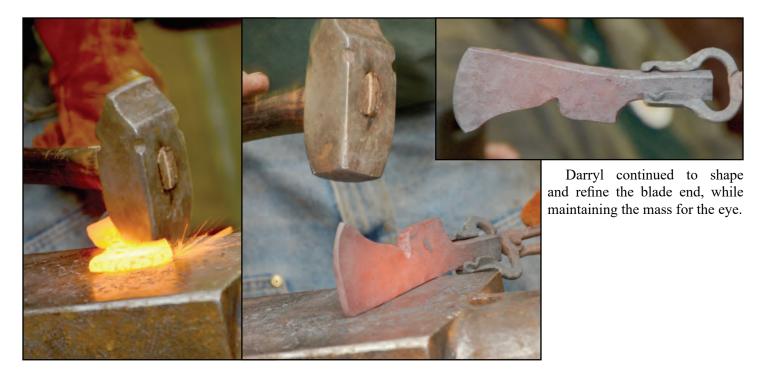














A steel bit set into the blade makes a harder edge. At the beginning of the demonstration Darryl was not sure he was going to have time to show this step, but as the demo was underway he changed his mind... Lucky for us!

Here Darryl is using pre-stressed concrete cable forge welded

together for the bit. The blade is split by hand, not cut with a band saw for two reasons: it is hard to keep the band saw centered, and it removes material at the bottom of the cut which will always show even after forge welding. He took care to split the blade edge evenly, in a step-wise fashion, and with patience Darryl achieved the desired fit. This took a number of heats, fitting the blade bit then forging deeper, until the bit could be pounded into the blade so that ideally it is 1/16" inside the edge. This is to prevent it from squirting out when forge welded. Darryl widened the slit, with chisel and with a hammer on the edge of the anvil, and cleaned it up to prepare it for a solid forge weld.





Finishing touches in preparation for the forge weld, wire brush really well to clean, and flux and weld then flux and weld again. Cut off leaving a bit of the bit sticking out on the side.















Clean up with a file, and take out any waffling of the blade. Take a few hits to shape the transition from the blade to the eye of the tomahawk.

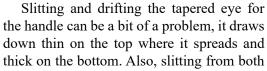


blade.

Darryl uses graphite powder for easy release of chisels and drifts. He dips the tool in water to cool, then into the graphite. He turns the chisel 180° each quench, to prevent drifting side to side. He uses two chisels, the first is narrower, easier to start the cuts. The second is wider, closer to the length of the desired slit.









sides there is a tendency to form an hourglass shape on the inside of the eye. Darryl skillfully forged out this unwanted swelling in the middle by forging it over the horn and using a drift the desired size. Tomahawk drifts (mandrels) are available from Blacksmith Depot. It took many heats and precision forging to get rid of the lump without distorting the eye. Darryl makes all these steps look quite easy, they are not.

#### Forging the ram's head.

Drawing out then splitting guarantees that the horns will

be the same length. Cut horns from the bottom side of axe, which will be come the top when they are bent in the next step. Spread the horns a little more than 90° then bring the points together.



At 5/8" from the cut, bend over the anvil edge to not quite 90°. This fold is the crux of the ram's head. Only

forge from the fold forward. It is a little tricky getting started on the little bump you will be working on.





Draw from both sides if the nub is even, or draw more from one side to make the face even.





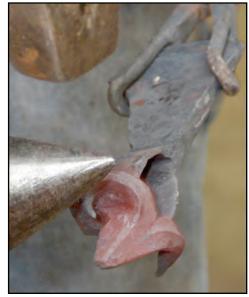
Clean up the angle of the horns and the corner of the slit. Even trophy animals are not perfectly symmetrical, but try to keep the head balanced and even.





Curl the horns before forging the facial features, to avoid mashing up the face while rolling the horns. Curl the horns over the anvil, then perfect with hammer blows. The head twisted a bit so Darryl put it on a drift, put it in a vise and straightened it out. He proceeded to forge the facial features using a pointed punch and straight chisel.















^ The finished tomahawk
< Finishing the handle
Some of the tools from the demo. >

Note the tongs grabbing the eye while working on the blade in the final clean up.



Darryl Nelson is a founding member of the NWBA and has generously given an incalculable number of hours and materials to our organization over the years. He has been a professional

blacksmith for over four decades and has taught at dozens of conferences and craft schools over the years. He is one of the best blacksmithing teachers and demonstrators around, if you have an opportunity to learn from him Do It! Also, his instructional videos are available online, do a search to find the current outlets. The videos cover very meticulously every step of each project, and they are highly recommended.

Thank you Darryl for your fantastic demonstration, and for all you do for the NWBA.

## NWBA CONFERENCE 2018 Friday May 11- Sunday May 13 2018

Planning for the conference is well underway. More info about our demonstrators will be posted as soon as they are available. Below is a brief outline of what to expect for 2018... and even more will be added as the plans are confirmed. Set up day Thursday, May 10, 2018

• Demonstrators:

Main Event Local Demonstrator: Scott Szloch

Main Event From Afar: Rachel David of Australia & her mate Ben Beams of New Zealand.

• Hands-On Classes:

Alair Wells: Beginner- Tooling up

Bill Apple: Intermediate- Getting the most out of your top tools.

Peter Clark: Advanced – Not The Usual Tongs

• Repoussé Station

- Gallery: bring your works to display in our gallery, show off your latest creations.
- Auction: support the NWBA with an entry into the auction, something hand-made, materials, tools or services. Anything of value that can be sold at our auction.
- Black Smoke Alley: bring your solid fuel forge and set up in Black Smoke Alley to demonstrate and offer hands on experiences, or just enjoy forging at your own setup during the conference.
- Tailgate Sales: fill your pickup with tools and materials, sell them to your friends, and buy enough of someone else's stuff to fill the truck back up.
- Contests with prizes: to be announced. If you have a great idea for a contest send it to nwbaweb@blacksmith.org
- **Potluck Social:** large grill will be available to cook your barbecue meats, bring food to share. It is a potluck and the NWBA will be providing the grill and the picnic spot and some food. Last year there was confusion about this, and even though a lot of people did not bring food, there was a lot to eat and people had a really good time hanging out and sharing a meal together. Plan on being there!
- · Banquet and Dessert Dash!

ONLINE REGISTRATION WILL BE AVAILABLE MID JANUARY 2018.

You will be able to order camping online too, and avoid the waiting on line at registration!!

An email with a link to registration will be sent to all members.



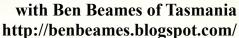
#### **Conference Demonstrators and Hands-On Instructors**

Meet the demonstrators and hands-on instructors for NWBA Conference 2018. The full information about their demonstrations will be printed in the next issue of the Hot Iron News, and published online as information comes in. In the meantime, here are some links to the demonstrators' websites to help find out more about them.





Rachel David of New Orleans, LA https://redmetal.net/

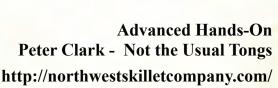








Scott Szloch of Seattle, WA http://szlochironworks.com/







Intermediate Hands-On Bill Apple - Getting the Most Out of Your Top Tools





## Tire Hammer for Auction at Conference 2018 by Randy Cryderman

The plans for this tire hammer are that of Clay Spencer design, but modified to locate the wheel on the rear of the mast to allow for easier maintenance.

The steel is reclaimed from my job as an iron worker, they were just going to throw it out so I just decided to ask for it so we could repurpose it.

Thanks to the generosity and ingenuity of Randy Cryderman and Ron Selby the NWBA will be auctioning off a Power Hammer. Randy and Ron are in the process of making 3 tire hammers, one for each of them to keep and one for our auction. ~Editor

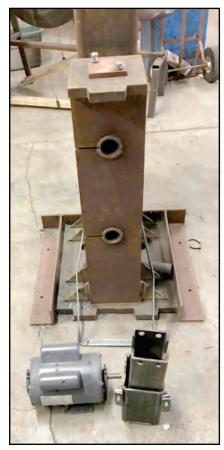
The anvil is several 3/4" plates welded together capped with a 1" plate drilled to accept the die plate built from repurposed elevator weight, along with the 1-1/4" base plate. The mast is unused elevator tubes that were extra due to change orders so the mast is 6"x8"x3/8" wall tube capped with 3/4" plate to hold the pillow blocks.

The 1-1/2 jack shaft is carried by pillow block bearings from Northern Hydraulic. The main spring and drive wheel were ordered from Raymond Head from Alabama, a Clay Spencer authorized parts supplier. Smaller items like quarter round, schedule 40 and 80 pipe we picked up at a local steel supplier in the area. We are hoping to have a set of flat and fullering dies to go with the hammer. The hammer is powered by a 1-1/2 hp motor which can be wired run on 110-220 the end user's choice. As of the time of the photos the hammer weighs around 875-900#, as seen. We are in the process of building the linkage arms to power the head.

Ron and I are building them in my shop, we get together as our time allows. Ron is great help, getting the parts laid out, cut, and cleaned up so we can assemble them together. The wealth of knowledge he brings helps to make this project a success.

Ron and I have shared the cost on the parts we did buy, but, other than that, we have basically just fabricated with material we were able to acquire as we moved forward, and the project is moving along. We are hoping to have the hammer operational by the end of January if all goes well, but that will depend on my work schedule.

We are hoping to have it running mid to late January if all goes well, and it will definitely be ready for auctioning off at our conference in May, and we are hoping that it will be great fund-raiser for the association.







## Calendar of Blacksmith Events 2018

January 27	NWBA Board Meeting, Longview, WA		
January 27	Demo/Open Forger, Longview WA		
February 24	Demo/Open Forge, Longview WA		
March 27-29	Mark Aspery Workshop, Longview WA		
March 31	Mark Aspery Demo, Longview WA		
April 12-14	California Blacksmith Assoc. Spring Conf.		
April 28	Demo/Open Forge, Longview WA		
May 11-13	NWBA CONFERENCE 2018, Longview, WA.		
June 26	Demo/Open Forge, Longview WA		
June 27-30	ABANA Conference 2018, Richmond VA		
July 21	Morning Open Forge, Longview WA		
July 25-28	Cowlitz Co. Fair Open House, Longview WA		
August 25	Maintenance/Open Forge, Longview WA		
Sept. 22	Demo/Open Forge, Longview WA		
Oct. 26-28	Swaptoberfest II, Longview WA		
Find the details of these events at www.blacksmith.org/events/			
Submit your blacksmith events:			

www.blacksmith.org/submit-event





## **Blacksmithing Schools Around the Northwest**

#### **Backwoods Blacksmith**

Between Sutherlin and Elkton Oregon on Hwy 138.
Instructor and owner is Gene Bland
Beginning blacksmithing, tool making, organic and garden art.
541 459 2879
bland2879@yahoo.com

#### **Bridgetown Forge**

1812 North Columbia Blvd. Portland, OR, 97217 http://www.bridgetownforge arnon@bridgetownforge.com Phone: 503-804-1524

New classes are being developed on a continuous basis, and classes to be offered in near future include: power hammer work, forging a cleaver, forging a sushi knife, hammer-making, and axemaking.

#### **Cascadia Center For Arts & Crafts**

P.O. Box 64

Government Camp, Oregon 97028

http://www.cascadiaart.org/

Blacksmithing, Visual Arts, Painting & Drawing, Photography, Fiber

Arts, Glass, Jewelry

#### **Clackamas Community College**

19600 Molalla Avenue Oregon City, Oregon 97045 Phone: 503-594-6000

Website: http://www.clackamas.edu/

Offering blacksmithing classes under the Welding Technology

program.

#### **Clatsop Community College**

1651 Lexington Avenue Astoria, OR 97103 Phone: 503-325-0910 Toll Free 1-855-252-8767;

Website: http://www.clatsopcc.edu/

Blacksmithing classes are taught through the Historic Preservation

Program

#### Incandescent Ironworks Ltd.

Spokane, WA 509-456-8321

At Incandescent Ironworks I teach introductory and intermediate blacksmithing, introductory and intermediate knife making, and tailored instruction on selected smithing topics.

Contact: Steve McGrew: stevem@incandescent-iron.com www.incandescent-iron.com/blcl.html

#### **Old West Forge**

PO BOX 2105

White Salmon, WA 98672

(509) 493-4418

For additional details contact Tim Middaugh:

tim@oldwestforge.com.

Current classes are listed at www.oldwestforge.com

#### **Pratt Fine Arts Center**

1902 South Main Street Seattle, WA 98144 http://www.pratt.org/ Phone: 206.328.2200 Fax: 206.328.1260 Email: info@pratt.org

#### Studio 4 Forging Facility LLC

A state of the art Knife Making and Blacksmith school in Seattle.

Yelm, WA 98597

Email David Lisch: studio4@davidlisch.com

#### **Thorne Metals Studio**

13751 Daybreak Ln Anacortes, WA 98221 (360) 293 8257 Current classes are listed at: http://learnblacksmithing.com

If you would like to list your blacksmith school here, please send your information to nwbainfo@gmail.com.

Editor's note: As a 501(c)3 non-profit organization there are limitations to how we are allowed promote our members' businesses. The listings will now include contact information and one descriptive sentence for your school, a policy subject to change.

To publicize your class you may send your event listing to the editor for inclusion in our online calendar. A short paragraph about the class and time, location, and fee information only please. Please send information about your events, school and class listings to <a href="mailto:nwbainfo@gmail.com">nwbainfo@gmail.com</a>

## The perils of reenactment



Cartoon by John Andrews
doodlepalooza.blogspot.com

After years of blacksmith reenactment, Carl began to feel like a forgery.

"To promote and preserve the Art and Craft of Blacksmithing while building friendship and good will."

#### 2018 MEMBERSHIP REGISTRATION FORM

The NorthWest Blacksmith Association is a Washington corporation and a 501 (c) 3 non-profit charitable organization founded in 1979. Now over 400 strong and growing. We have something to offer to anyone with an interest in blacksmithing, from the beginner to the serious professional.

Members of the N.W.B.A. receive our award-winning newsletter The Hot Iron News, the opportunity to attend N.W.B.A. semi-annual conferences, frequent hands on workshops and events, and the camaraderie and support of hundreds of blacksmith enthusiasts.

#### RELEASE OF LIABILITY

I hereby acknowledge that I have voluntarily applied to become a member of the NorthWest Blacksmith Association, NWBA.

I understand that blacksmithing is an inherently dangerous activity that involves certain risks and dangers. I acknowledge and understand that those risks include the potential for bodily injury.

Nevertheless, in full knowledge and understanding of the above risks, hazards, or dangers, I freely, voluntarily and knowingly agree to assume those risks. By my signature below, I hereby agree to assume all responsibility for myself and my property and hereby release and discharge Northwest Blacksmith Association, NWBA; it's members, employees, representatives, associates, independent contractors, and board from any and all claims, demands, damages, expenses, and any other liability for injuries or damages of any description which may occur as a result of my participation in this organization as a member. This Release shall be legally binding on heirs, my assigns, successors, estate, legal guardians, executors and me.

If I am signing this agreement on behalf of another person, I certify that all representations are true with respect to the participant and that I am the participant's legal guardian or custodial parent with full authority to bind the participant and myself to the terms of the Release.

I have carefully read this Release and fully understand its contents. I am aware that in signing this Release I am releasing and waiving certain rights that I may have and enter into this contract on behalf of myself and/ or my family of my own free will.

THIS IS A RELEASE OF LIABILITY DO NOT SIGN THIS REGISTRATION FORM AND RELEASE IF YOU DO NOT UNDERSTAND IT OR DO NOT AGREE WITH ITS TERMS.

Signature	:	Date:	Dues are:
Print Nar	ne:		\$60 in U.S.A. \$70 outside U.S.A.
Address:			☐ New Member
City:			☐ Renewing Member
State:	Z	ip:	Č
			NWBA membership is valid for one year from the
			date of signup. Renewals
*(if you are already registered as a user at www.blacksmith.org your website user account will be updated to allow member privileges only if you use the same email address as the one used to register on the website)		are sent out on a quarterly basis, look for your renewal letter sometime	
Mail to:	NorthWest Blacksmith Association 4742 42nd Ave. S.W. #185 Seattle, WA 98116	yww blackemith org	in the 3 month period around the anniversary of your registering for membership,.

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## How to be The Devil's Blacksmith



We have gotten so much attention and positive feedback for our previous blacksmith video project, The Devil's Blacksmith that we decided to make a video that will cover the whole process of our work.

- · Building & handling fire
- Choosing right materials
- Setting air level
- Covers different kinds of forge welding techniques
- Follow the process of forge welding the video tutorial's main piece step by step

You can support this project AND get a truly amazing deal on the video, and other Devil's Blacksmith perks! They would make a GREAT GIFT!!Don't miss out!

indiegogo.com/projects/how-to-be-the-devil-s-blacksmith#/

## **Bent River Forge**

Farrier Supplies (541)847-5854 Fax (541)847-5996 farriersupplies@gmail.com



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## www.standardsteelnw.com



#### Classified Ads

Free to members, \$10 for non-members Classified ads are 50 words, text only.

Whitlox Wood-Fired Forges specially designed for are forging with raw wood charcoal fuel. All our forges are made from 11 gauge steel and double lined with kaowool and firebrick for super long life. Use discount code NWBA for a \$50 discount on any full size forge at www.whitloxhomestead.com. Phone: 503-952-6540

> For sale: Quality blacksmith coal, coke and charcoal.

Contact Jim von Mosch at Mountain Brook Forge 509-493-2246 or

Mountainbrookforge@gmail. com for price and availability.

Your Ad Here!

Members can post 50 word classified ads for FREE.

Advertising **Submissions**  Email to: NWBAinfo@gmail.com

or submit online:

http://blacksmith.org/hot-iron-news-advertisement-submission-form/

Mail to: NWBA Seattle, WA 98116

Download Ad Specification and Pricing Sheet online at: 42nd Ave SW #185 http://blacksmith.org/advertising-hot-iron-news/

If you have any questions do not hesitate to contact editor Amy

Mook at nwbainfo@gmail.com

#### ATTENTION MEMBERS

Are you receiving our informative monthly email announcements? Sign up online:

http://blacksmith.org/sign-upemail-announcements/

Get the up to the minute details of NWBA events and news.

Announcements that are of general interest to blacksmiths and not specifically in the business interest of an individual will be printed free of charge in the Hot Iron News, at the discrepancy of the editor and within the guidelines of the NWBA Board of Directors. Submit your announcements for publication in the NWBA Hot Iron News and our website.

## **Hot Iron News**



A publication of the Northwest Blacksmith Association 4742 42nd Ave SW #185 Seattle WA 98116

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### **Grand Prize Winning Swap!**

Mark Manley purchased this 100# Beaudry Power Hammer, the biggest and most expensive swap made this year (unsubstantiated fact). First attempt to move it with a Subaru ended in a bottom-out. With a little help from friends and better equipment the move was finally successful.



Moments after the deal was confirmed...

From left to right: Smokey Adams, Dennis Prince, Mark Manley, Benny (seller of the hammer, last name unknown), Hunter Dahlberg, David Tuthill (in back), Jeff Holtby, and Spencer Knight

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